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AUG 13 2004
PATENT & TRADEMARK OFFICE

Attorney's Docket No.: 07039-442001 /fiv

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Lieping Chen
Serial No. : 10/679,775
Filed : October 6, 2003
Title : B7-H1 AND B7-DC VARIANTS

Art Unit : 1644
Examiner : Unknown

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (3 pages);
3. Copies of Cited References (45 references); and
4. A Return Postcard.

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Respectfully submitted,

Date: August 10, 2004

Elizabeth N. Kaytor

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INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed before the receipt of a first Office action on the merits.

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07039-442001	Application No. 10/679,775
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant Lieping Chen	
37 CFR 1.98(b))		Filing Date October 6, 2003	Group Art Unit 1644

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U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AB	Agata et al., "Expression of the PD-1 antigen on the surface of stimulated mouse T and B lymphocytes," International Immunology, 1996, 8:765-772
	AC	Bajorath et al., "Molecular modeling of CD28 and three-dimensional analysis of residue conservation in the CD28/CD152 family," J. Mol. Graph. Model., 1997, 15:135-139
	AD	Berman et al., "The Protein Data Bank," Nucl. Acids Res., 2000, 28:235-242
	AE	Chambers and Allison, "Co-stimulation in T cell responses," Curr. Opin. Immunol., 1997, 9:396-404
	AF	Chapoval et al., "B7-H3: A costimulatory molecule for T cell activation and IFN-γ production," Nature Immunology, 2001, 2:269-274
	AG	Connolly, "Analytical Molecular Surface Calculation," J. Appl. Cryst., 1983, 16:548-558
	AH	Cristiano and Roth, "Molecular conjugates: a targeted gene delivery vector for molecular medicine," J. Mol. Med., 1995, 73:479-486
	AI	Dong et al., "Tumor-associated B7-H1 promotes T-cell apoptosis: A potential mechanism of immune evasion," Nature Medicine, 2002, 8:793-800
	AJ	Dong et al., "B7-H1, a third member of the B7 family, co-stimulates T-cell proliferation and interleukin-10 secretion," Nature Med., 1999, 5:1365-1369
	AK	Engh and Huber, "Accurate Bond and Angle Parameters for X-Ray Protein Structure Refinement," Acta Cryst., 1991, A47:392-400
	AL	Fechteler et al., "Prediction of Protein Three-dimensional Structures in Insertion and Deletion Regions: A Procedure for Searching Data Bases of Representative Protein Fragments Using Geometric Scoring Criteria," J. Mol. Biol., 1995, 253:114-131
	AM	Freeman et al., "Engagement of the PD-1 Immunoinhibitory Receptor by a Novel B7 Family Member Leads to Negative Regulation of Lymphocyte Activation," J. Exp. Med., 192:1027-1034
	AN	Guatelli et al., "Isothermal, *in vitro* amplification of nucleic acids by a multienzyme reaction modeled after retroviral replication," Proc. Natl. Acad. Sci. USA, 1990, 87:1874-1878
	AO	Hyrup et al., "Peptide Nucleic Acids (PNA): Synthesis, Properties and Potential Applications," Bioorgan. Med. Chem., 1996, 4:5-23
	AP	Ikemizu et al., "Structure and Dimerization of a Soluble Form of B7-1," Immunity, 2000, 12:51-60
	AQ	Ishida et al., "Induced expression of PD-1, a novel member of the immunoglobulin gene superfamily, upon programmed cell death," EMBO J., 1992, 11:3887-3895
	AR	Ishida et al., "Differential expression of PD-L1 and PD-L2, ligands for an inhibitory receptor PD-1, in the cells of lymphohematopoietic tissues," Immunology Letters, 2002, 84:57-62
	AS	Krummel and Allison, "CTLA-4 Engagement Inhbits IL-2 Accumulation and Cell Cycle Progression upon Activation of Resting T Cells," J. Exp. Med., 1996, 183:2533-2540
	AT	Latchman et al., "PD-L2 is a second ligand for PD-1 and inhibits T cell activation," Nature Immunology, 2001, 2:261-268

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Other Documents (include Author, Title, Date, and Place of Publication)		
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	AU	Lenschow et al., "CD28/B7 System of T Cell Costimulation," Annu. Rev. Immunol., 1996, 14:233-258
	AV	Levitt, "Accurate Modeling of Protein Conformation by Automatic Segment Matching," J. Mol. Biol., 1992, 226:507-533
	AW	Lewis, "PCR's Competitors Are Alive and Well and Moving Rapidly Towards Commercialization," Genetic Engineering News, 1992, Vol. 12, 3 pages
	AX	Nishimura et al., "Development of Lupus-like Autoimmune Diseases by Disruption of the *PD-1* Gene Encoding an ITIM Motif-Carrying Immunoreceptor," Immunity, 1999, 11:141-151
	AY	Nishimura et al., "Immunological studies on PD-1-deficient mice: implication of PD-1 as a negative regulator for B cell responses," International Immunology, 1998, 10:1563-1572
	AZ	Nishimura et al., "Autoimmune Dilated Cardiomyopathy in PD-1 Receptor-Deficient Mice," Science, 2001, 291:319-322
	AAA	Ostrov et al., "Structure of Murine CTLA-4 and Its Role in Modulating T Cell Responsiveness," Science, 2000, 290:816-819
	ABB	Penix et al., "Two Essential Regulatory Elements in the Human Interferon γ Promoter Confer Activation Specific Expression in T Cells," J. Exp. Med., 1993, 178:1483-1496
	ACC	Ponder et al., "Tertiary Templates for Proteins—Use of Packing Criteria in the Enumeration of Allowed Sequences for Different Structural Classes," J. Mol. Biol., 1987, 193:775-791
	ADD	Rathmell and Thompson, "The Central Effectors of Cell Death in the Immune System," Annu. Rev. Immunol., 1999, 17:781-828
	AEE	Schwartz et al., "Structural mechanisms of costimulation," Nature Immunology, 2002, 3:427-434
	AFF	Schwartz et al., "Structural basis for co-stimulation by the human CTLA-4/B7-2 complex," Nature, 2001, 410:604-608
	AGG	Stamper et al., "Crystal structure of the B7-1/CTLA-4 complex that inhibits human immune responses," Nature, 2001, 410:608-611
	AHH	Summerton and Weller, "Morpholino Antisense Oligomers: Design, Preparation and Properties," Antisense Nucleic Acid Drug Dev., 1997, 7:187-195
	AII	Swallow et al., "B7h, a Novel Costimulatory Homolog of B7.1 and B7.2, Is Induced by TNFα," Immunity, 1999, 1:423-432
	AJJ	Tamura et al., "B7-H1 costimulation preferentially enhances CD28-indepenent T-helper cell function," Blood, 2001, 97:1809-1816
	AKK	Thompson et al., "*cis*-Acting Sequences Required for Inducible Interleukin-2 Enhancer Function Bind a Novel Ets-Related Protein, Elf-1," Mol. Cell. Biol., 1992, 12:1043-1053
	ALL	Todd et al., "Transcription of the Interleukin 4 Gene Is Regulated by Multiple Promoter Elements," J. Exp. Med., 1993, 177:1663-1674
	AMM	Tseng et al., "B7-DC, a New Dendritic Cell Molecule with Potent Costimulatory Properties for T Cells," J. Exp. Med., 2001, 193:839-845
	ANN	Walunas et al., "CTLA-4 Ligation Blocks CD28-dependent T Cell Activation," J. Exp. Med., 1996, 183:2541-2550
	AOO	Wang et al., "Ligand Binding Sites of Inducible Costimulator and High Avidity Mutants with Improved Function," J. Exp. Med., 2002, 195:1033-1041
	APP	Wang et al., "Costimulation of T cells by B7-H2, a B7-like molecule that binds ICOS," Blood, 2000, 96:2808-2813

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	AQQ	Weiss, "Hot Prospect for New Gene Amplifier: Ligase chain reaction, a combination DNA amplifier and genetic screen could do for DNA diagnostics what PCR has done for basic molecular biology," Science, 1991, 254:1292-1293
	ARR	Williams and Barclay, "The Immunoglobulin Superfamily – Domains for Cell Surface Recognition," Ann. Rev. Immunol., 1988, 6:381-405
	ASS	Wong et al., "Human GM-CSF: Molecular Cloning of the Complementary DNA and Purification of the Natural and Recombinant Proteins," Science, 1985, 228:810-815
	ATT	Yoshinaga et al., "T-cell co-stimulation through B7RP-1 and ICOS," Nature, 1999, 402:827-832

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